

The Evolution of Aircraft Carrier Airborne Early Warning



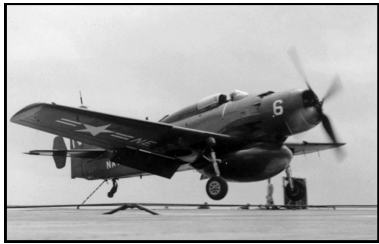
TBM-3 AVENGER

The TBM-3 was the first Airborne Early Warning (AEW) platform to enter Naval Service. A total of 40 TBM-3Ws fitted with the AN/APS-20 radar entered service in 1945.



AD-3W SKYRAIDER

Replacing the AVENGER, the AD-3W entered service as an AD-1 variant in 1950. Originally designed for WWII, it was the primary naval AEW platform for the Korean and Vietnam conflicts.



AD-4W SKYRAIDER

An upgrade to the AD-3W SKYRAIDER, the AD-4W sported an updated engine which increased the range and station time of the SKYRAIDER.



AD-5W SKYRAIDER

Also known as the EA-1E, this upgrade to the SKYRAIDER allowed for a four person crew. A total of 218 planes were built to support naval operations.



WF / E-1 TRACER

The E-1 TRACER was the first dedicated Airborne Early Warning aircraft used by the Navy and entered service in 1957. It carried the AN/APS-82 atop the aircraft and was outfitted with the ability to actively distinguish aircraft from clutter resulting from its own movement.

W2F / E-2A HAWKEYE

Designed to meet the constraints of two different carrier sizes, the E-2A was plagued with structural and cooling issues which led to only 59 aircraft being built. However, it was the first AEW model to fully integrate into the Naval Tactical Data System.



E-2B HAWKEYE

An answer to the issues that arose with the E-2A, the E-2B was a significant upgrade to the AEW fleet. Despite the structural upgrades, this version of the Hawkeye was meant to be the bridge between the "A" variant and future versions of the Hawkeye.



E-2C HAWKEYE

The E-2C became the long term answer to the need for an all-weather, carrier based Airborne Early Warning platform. Since its fleet introduction in 1971, the E-2C has received multiple upgrades in avionics and structure.



E-2C CNS/ATM HAWKEYE 2000

The most current version of the E-2C is the CNS/ATM Hawkeye 2000. It includes a glass cockpit interface for the pilots for ease of navigation. The CIC has an upgraded work station and various radio upgrades that improve communication capabilities.



E-2D ADVANCED HAWKEYE

The E-2D Advanced Hawkeye features a state-of-the-art radar with a two-generation leap in capability and upgraded aircraft systems that allow the aircraft the ability to work in the littoral and over land.



The Evolution of Carrier Onboard Delivery



TF-1 / C-1 TRADER

The TF-1, later designated the C-1, provided Carrier Onboard Delivery (COD) from the 1950s through the 1980s. It was based on the design of the S2F / S-2 Tracker.



C-2A GREYHOUND

The C-2A Greyhound can transport cargo between ship and shore in a matter of hours. As a derivative of the E-2C Hawkeye, the C-2A has a common wing with the Hawkeye but has a widened fuselage and a rear loading ramp. The interior arrangement of the cabin can accommodate priority cargo like jet engines, passengers, litter patients and critical spare parts.



CMV-22B OSPREY

The CMV-22B is the Navy's long-range/medium-lift element of the intra-theater aerial logistics capability. It fulfills the Joint Force Maritime Component Commander time-critical logistics air connector requirements by transporting personnel and priority cargo from advance bases to the aircraft carrier.